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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/829,474 04/09/2001		Douglas E. Chrzanowski	END919980129US2 8680		
7590 08/20/2004			EXAMINER		
IBM Corporation / IP Law N50/040-4 1701 North Street			COLE, ELIZABETH M		
Endicott, NY 13760			ART UNIT	PAPER NUMBER	
			1771		

DATE MAILED: 08/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	No.	Applicant(s)	
		09/829,474		CHRZANOWSKI ET AL.	
Office Action Summary		Examiner		Art Unit	
		Elizabeth M.	Cole	1771	
Period fo	The MAILING DATE of this communication	appears on the c	over sheet with the	correspondence addres	s
A SH THE - Exte after - If NO - Failt - Any	IORTENED STATUTORY PERIOD FOR REIMAILING DATE OF THIS COMMUNICATION ensions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. The period for reply specified above is less than thirty (30) days, a poperiod for reply is specified above, the maximum statutory per ure to reply within the set or extended period for reply will, by state than three months after the material part of the provided by the Office later than three months after the material part of the provided by the Office later than three months after the material part of the provided by the Office later than three months after the material part of the provided by the Office later than three months after the material part of the provided by the Office later than three months after the material part of the provided by the Office later than three months after the material part of the provided by the Office later than three months after the material part of the provided by the Office later than three months after the material part of the provided by the Office later than three months after the material part of the provided by the Office later than three months after the material part of the provided by the Office later than three months after the material part of the provided by the Office later than three months after the provided by the Office later than three months after the provided by the Office later than three months after the provided by the Office later than three months after the provided by the Office later than three months after the provided by the Office later than three months after the provided by the Office later than three months after the provided by the Office later than three months after the provided by the Office later than three months after the provided by the Office later than three months after the provided by the Office later than three months after the provided by the Office later than three months after the provided by the Office later than three months after the	N. R. 1.136(a). In no event, reply within the statutor iod will apply and will extute. cause the applica	however, may a reply be ti y minimum of thirty (30) da pire SIX (6) MONTHS fron ion to become ABANDON	mely filed ys will be considered timely. the mailing date of this commur	nication.
1)[🛛	Responsive to communication(s) filed on 6	6/16/03 .			
2a)□	This action is FINAL . 2b)⊠	This action is no	n-final.		
3) <u></u> Disposit	S ince this application is in condition for allo closed in accordance with the practice und ion of Claims	owance except fo er <i>Ex parte Qua</i>	or formal matters, p yle, 1935 C.D. 11,	rosecution as to the me 453 O.G. 213.	erits is
4)⊠	Claim(s) 1-12 is/are pending in the applicat	ion.			
	4a) Of the above claim(s) is/are withd	lrawn from consi	deration.		
5)[Claim(s) is/are allowed.				
6)⊠	Claim(s) 1-12 is/are rejected.				
7)	Claim(s) is/are objected to.				
8)[Claim(s) are subject to restriction and	d/or election requ	irement.		
Applicati	on Papers				
9) 🗌 '	The specification is objected to by the Exami	ner.			
10) 🔲 -	The drawing(s) filed on is/are: a)□ ac	cepted or b)□ ob	ected to by the Exa	miner.	
	Applicant may not request that any objection to	the drawing(s) be	held in abeyance. S	ee 37 CFR 1.85(a).	
11)[The proposed drawing correction filed on			oved by the Examiner.	
4->	If approved, corrected drawings are required in		action.		
	The oath or declaration is objected to by the	Examiner.			
	nder 35 U.S.C. §§ 119 and 120				
_	Acknowledgment is made of a claim for fore	ign priority unde	35 U.S.C. § 119(a	ı)-(d) or (f).	
a)[☐ All b)☐ Some * c)☐ None of:				
	1. Certified copies of the priority docume				
	2. Certified copies of the priority docume				
	 Copies of the certified copies of the pr application from the International E ee the attached detailed Office action for a li 	Bureau (PCT Ru	e 17.2(a)).	_	e
14)∐ A	cknowledgment is made of a claim for dome	stic priority unde	r 35 U.S.C. § 119(e	e) (to a provisional appli	cation).
15) <u> </u>	☐ The translation of the foreign language packnowledgment is made of a claim for dome	provisional applications	ation has been rec r 35 U.S.C. §§ 120	eived. and/or 121.	
Attachment	• •				
2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	4) 5) 6)		(PTO-413) Paper No(s) Patent Application (PTO-152)	
S. Patent and Tra TO-326 (Rev	A . A	Action Summary		Part of Paper No. 0803	

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- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/16/03 has been entered.
- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. \Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 11-107,112, (Machine translation attached).

JP 11-107,112 discloses a woven fiber glass sheet which is suitable for use in laminating processes in forming circuit boards. JP 11-107, 112 differs from the claimed invention because it is does not teach that the spaces between the fibers of the sheet should be less than or equal to the diameter of a wire positioned on the surface of the sheet. However, JP 11-107,112 does teach optimizing the weave density of the fiber glass cloth in order to increase the accuracy and efficiency of circuit boards which employ the fiber glass cloth. Therefore, it would have been obvious to have optimized the spacing between the fibers as taught by JP 11-107,112. One of ordinary skill in the art would have been motivated to optimize the spacing between the fibers in order to enhance the efficiency of processes which employ the glass cloth, since JP 11-107,112 recognizes that the weave density is a result effective variable. With regard to the new

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limitation, since JP '112 teaches optimizing the spacing to avoid variations in the molded product, it would therefore teach optimizing to prevent deformation of the circuit device, since the molded product in JP '112 is a circuit board.

- 4. Applicant's arguments filed 6/16/03 have been fully considered but they are not persuasive. Applicant argues that JP '112 does not teach selecting the spaces between the fibers to prevent deformation of the circuit device during the wire bonding process. However, the reference does not have to teach optimizing the space between the fibers for the same reason as the claimed invention. Further, JP '112 does teach optimizing the spacing in order to reduce variations in molding time and in the dimensions of the molded product. Since JP '112 does teach forming circuit boards, it seems that JP '112 is teaching optimizing the spacing in order to prevent variations in the circuit device. A variation in the circuit device which is not wanted in the final molded product would be the same as a deformation in the circuit device.
- 5. It is noted that the status modifier "Previously amended" should not be used, but instead "previously presented" should be used for those claims, (claims 4-5, 10-11).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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The fax number for all official faxes is (703) 872-9306.

Elizabeth M. Cole Primary Examiner Art Unit 1771

e.m.c